भारतीय मानक
Indian Standard

IS 5508 (Part 13) : 2020

मछली पकड़नें के गियर की मार्गदर्शिका

भाग 13 अंतर्देशीय जल के लिये मढ़े हुये गिलनेट

(पहला पुनरीक्षण)

Guide for Fishing Gear

Part 13 Framed Gillnet for Inland Water

(First Revision)

ICS 65.150

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भारतीय मानक ब्यूरो
BUREAU OF INDIAN STANDARDS
मानक भवन, 9 बहादुरशाह ज़फर मार्ग, नई दिल्ली – 110002
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI-110002
www.bis.gov.in www.standardsbis.in

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Textile Materials for Marine/Fishing Purposes Sectional Committee, TXD 18

FOREWORD

This Indian Standard (Part 13) was adopted by the Bureau of Indian Standards, after the draft finalized by Textile Materials for Marine/Fishing Purposes Sectional Committee had been approved by the Textile Division Council.

This standard was originally published in 1972 and has now been revised to incorporate the latest developments in this field.

This standard consists of number of parts. Part 1 deals with the general requirements while the subsequent parts cover different type of fishing gears.

The composition of the Committee responsible for the formulation of this standard is given in Annex B.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding off numerical values (*revised*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

Indian Standard

GUIDE FOR FISHING GEAR

PART 13 FRAMED GILLNET FOR INLAND WATER

(First Revision)

1 SCOPE

This standard (Part 13) specifies guidelines for construction of framed gillnets for inland water.

2 REFERENCES

The following standards contain provisions which, through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of these standards indicated below.

IS No.	*Title*
4401 : 2006	Textiles — Twisted nylon fishnet twines (*fifth revision*)
5508 (Part 1) : 2020	Guide for fishing gear — General
7533 : 2003	Textiles — Polyamide (nylon) monofilament yarn for fishing — Specification (*second revision*)

3 CONSTRUCTION

The particulars of webbing, ropes and other accessories used for construction of framed gillnets for inland water is given in the data sheet when read with Fig.1.

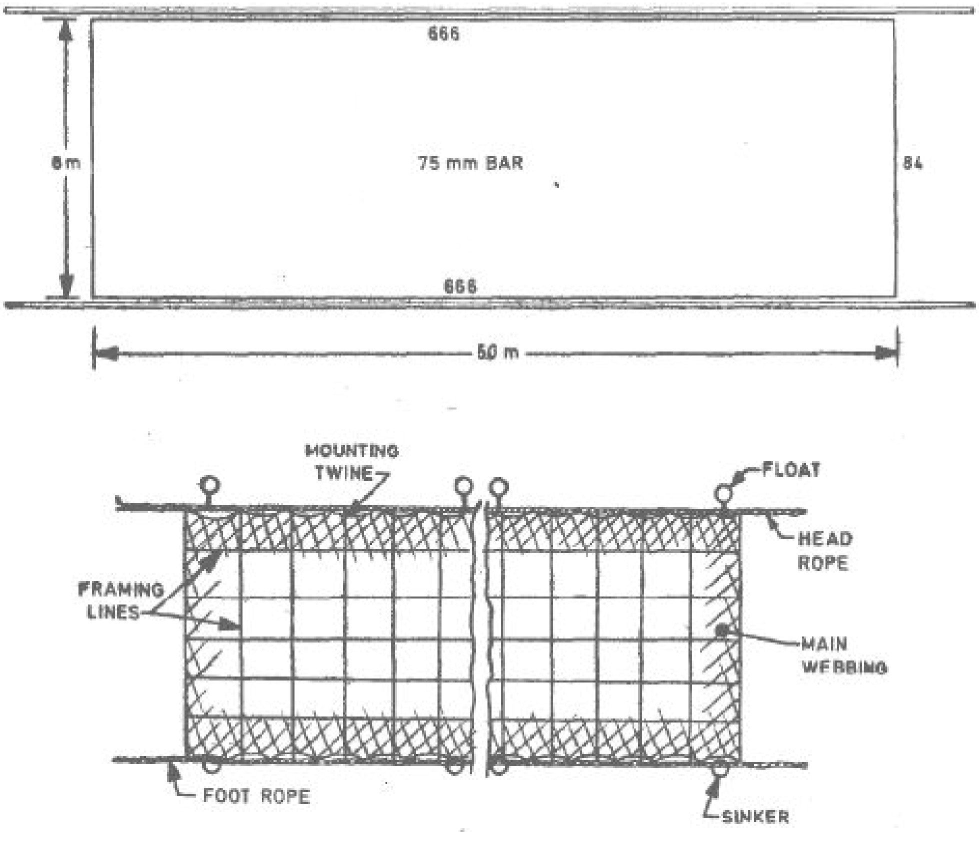

FIG. 1 FRAMED GILLNETS FOR INLAND WATER

GUIDE FOR FISHING GEAR: DATA SHEET FOR FRAMED GILLNET FOR INLAND WATER

Name of Gear : Framed Gillnet	Main Species Caught: Major Carps, Cat Fishes
Type of Net : Entangling Set Gillnet (for inland water)	Mode of operation: Surface, Midwater, Bottom
Number of Shots per Fleet : According to water space available	

PARTICULARS OF WEBBING

Items	Selvedge	Main Webbing
Material	Nylon (Polyamide) multifilament	Nylon (Polyamide) multifilament
Type of knot	Double trawl	Single/Double
Colour	Natural	Natural
Material size, denier/(dia, mm)	210 × 4 × 3[1]	210 × 2 × 3[2]
Breaking load, N	151.9	75.5
Stretched mesh, mm	150	150
Upper edge, meshes (No.)	666	666
Lower edge, meshes (No.)	666	666
Depth, meshes (No.)	2 + 2	80
Coeffiecient of hanging		
a) Horizontal	0.5	0.5
b) Vertical	0.5	0.5
Hanging	50/99.90	50/99.90

PARTICULARS OF ROPES

Lines, Ropes	Material	Colour	Size	Breaking Load, kg	Length, m
Head rope	Nylon	Natural	3 mm	90	51.0
Foot rope	Nylon	Natural	3 mm	225	51.0
Mounting line (denier)	Nylon	Natural	210 × 4 × 3	11.7	-
Framing Lines					-
Horizontal	Nylon	Natural	210 × 15 × 3	40	
Vertical	Nylon	Natural	210 × 15 × 3	40	
Brace line	Nylon	Natural	210 × 15 × 3	40	-
End rope	Nylon	Natural	5 mm	225	-

PARTICULARS OF OTHER ACCESSORIES

Items	Floats	Sinkers
Number	10	10
Material	Polyethylene	Iron rings
Shape	Spherical	Spherical
Diameter, mm	150	150
Static buoyancy, g	15	…
Weight in air, g	225	200
Buoyancy – Ballast Ratio	~ 2 : 1	

NOTES —

1 IS 5508 (Part I). forms a preface to this part.

2 For terminology on gill nets, *see* Annex A.

[1] Details of gill net twines have been covered in IS 4401.

[2] Details of polyamide monofilament yarns have been covered in IS 7533.

ANNEX A

(*Informative*)

GLOSSARY OF TERMS RELATING TO GILLNETS

Boat Rope – Rope connecting the craft to the bridles at the proximal end of the fleet.

Bottom Drift – The method of operation of the gear when it is allowed to drift close to the bottom layers of water.

Bottom Set – The method of operation of the gear when fixed close to the bottom layers of the water.

Brace Line – The line used for lacing the adjoining shots in a fleet prior to operation.

Bridles – A folded rope whose ends are connected to the free ends of the head and foot ropes of the end shots of a fleet connecting the net to the boat rope or the fleet and rope. The length of the rope is at least twice the height of the net.

Fleet – A set of shots operated by a gill netter which varies from 10 to 50 depending on the ground of operation and facilities available on the craft used.

Fleet End Rope – A piece of rope folded and interlocked to the central part of the bridles at the distal end of a fleet forming two arms, one of which bears the master float and the other the master sinker.

Float Line – The twine used for the attachment of the master floats to the head rope.

Floats/ Master Floats – Float attached to the distal end of the fleet end rope to enable location of the fleet end. For night operation this is often substituted or supplemented by providing a flag, floating lamp or a self igniting light in order to ensure safety of the fleet.

Floats Small – Floats, attached to the head rope meant to give the required buoyancy for enabling the net to spread up for fishing.

Foot Rope – The rope to which the lower edge of the net is attached finally. Weights are attached to this rope for stretching the net downwards.

Gillnet – A rectangular wall of webbing provided with a head rope at the upper edge bearing floats and with or without a foot rope at the lower edge bearing sinkers; the mechanism of capture being enmeshing of the fish either in a single lumen or several lumens of the meshes at the gill region or any part of body between the gill region and dorsal fin.

Head Rope – The rope or line to which the upper edge of the net is finally attached. Floats are attached to this rope for keeping the net buoyant.

Horizontal Framing Line – The lines inserted through the lumen of the meshes at regular intervals to make horizontal sections in a frame net.

Main Webbing – The webbing in a shot meant for actual capture of fish.

Marker Floats – Floats specially used on the float line to fix the net at the desired depth.

Master Sinker – A heavy weight used at the fleet end so as to enable controlled drifting of the fleet in a drift net and setting in set nets.

Midwater Set – The method of operation of the gear when fixed in any region between the surface and bottom layers of water.

Midwater Drift – The method of operation of the gear when it is allowed to drift in any region between the surface and bottom of the sea.

Mounting Twine – Twine used for the attachment of the webbing to the head rope and foot rope.

Selvedge – A definite number of rows of meshes at the upper and lower borders and at extremities of the webbing fabricated with twines thicker than those of the main webbing.

Shot – Indicates a single piece of net in a fleet.

Sinkers of the Foot Rope – Weights used at the foot rope to enable the proper spreading of the net.

Surface Drift – The method of operating of the gear when it is allowed to drift at the surface layers of the water in such a way that the head rope of the net is exactly in line with the surface of water.

Surface Set – The method of operation of the gear when fixed for operation at the surface layers of the water in such a way that the head rope of the net is exactly in line with the surface of water.

Vertical Framing Line – The lines extending from head rope to foot rope passed through meshes in the webbing at regular intervals to make vertical partitions in framed nets. The intersecting point of this line with horizontal line is tied fast as mentioned above.

ANNEX B

(*Foreword*)

COMMITTEE COMPOSITION

Textile Materials for Marine/Fishing Purposes Sectional Committ1ee, TXD 18

Organization	*Representative(s)*
ICAR – Central Institute of Fisheries Technology, Kochi	Shrimati (Dr) Saly N. Thomas (***Chairperson***)
Association of Indian Fishery Industries, New Delhi	Shri T. Ragunath Reddy Dr C. Babu Rao (*Alternate*)
Centre for Marine Living Resources and Environment, Kochi	Dr Sherine Sonia Cubelio Dr Hashim (*Alternate*)
Central Institute of Fisheries, Nautical & Engg Training, Kochi	Shri M. G. Makwana
ICAR - Central Institute of Brackishwaterc Aquaculture, Chennai	Shri Jose Antony
ICAR -Central Institute of Fisheries Technology, Kochi	Shrimati (Dr) Saly N. Thomas Dr Sandhya K. M. (*Alternate*)
ICAR - Central Marine Fisheries Research Institute, Kochi	Dr Ratheesh
Fisheries Development Commissioner, New Delhi	Dr Paul Pandiyan Dr Sanjay Pandey (*Alternate*)
Fisheries Survey of India, Mumbai	Dr. S. Ramachandran Shri A. E. Ayoob (*Alternate*)
Garware Technical Fibres Ltd, Pune	Shri R. M. Telang Shri S. V. Raut (*Alternate*)
Indian Fishnet Manufacturers' Association, Chennai	Shri M. K. Unni Krishnan
National Institute of Ocean Technology, Chennai	Dr G. Dharani Dr N. V. Vinithkumar (*Alternate*)
Office of the Textile Commissioner, Mumbai	Shri Ajay Pandit Shri Sanjay Charak (*Alternate*)
Reliance Industries Limited, Mumbai	Shri M. S. Verma Shri Keshav Pareek (*Alternate*)
SRFP Limited, Chennai	Shri N. Santhan Shri R. Raghvendra Sayee (*Alternate*)
The Silk and Art Silk Mills' Research Association, Mumbai	Shrimati Ashwini A. Sudam Shri Ravi Singh (*Alternate*)
The Karnataka Fisheries Development Corporation Ltd, Bangaluru	Managing Director
The Kerala State Cooperative Federation for Fisheries Development Ltd, Kochi	Shri P. Surendren
The Marine Products Export Development Authority, Kochi	Dr. M. K. Rammohan Shri A. Sakthivel (*Alternate*)
BIS Directorate General	Shri A. K. Bera, Scientist 'F' and Head (TXD) [Representing Director General (*Ex-officio*)]

Member Secretary

Shri A. K. Bera
Scientist 'F' and Head (TXD), BIS

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BUREAU OF INDIAN STANDARDS

Headquarters:

Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi 110002
Telephones: 2323 0131, 2323 3375, 2323 9402 *Website*: www.bis.gov.in

Regional Offices:		*Telephones*
Central	Manak Bhavan, 9 Bahadur Shah Zafar Marg NEW DELHI 110002	2323 7617 2323 3841
Eastern	1/14 C.I.T. Scheme VII M, V.I.P. Road, Kankurgachi KOLKATA 700054	2337 8499, 2337 8561 2337 8626, 2337 9120
Northern	Plot No. 4-A, Sector 27-B, Madhya Marg CHANDIGARH 160019	265 0206 265 0290
Southern	C.I.T. Campus, IV Cross Road, CHENNAI 600113	2254 1216, 2254 1442 2254 2519, 2254 2315
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